

ABSTRACT

An alignment device is provided that includes (1) a first pusher adapted to contact an edge of a substrate supported on a stage and to laterally translate along a first path; (2) a second pusher adapted to contact the substrate edge and to laterally translate along a second path that is at an angle to and intersects the first path; (3) a frame, to which the first and second pushers are movably coupled, adapted to maintain the first and second pushers at an elevation of the substrate edge; (4) a first biasing element coupled between the first pusher and the frame and adapted to bias the first pusher against the substrate edge; and (5) a second biasing element coupled between the second pusher and the frame and adapted to bias the second pusher against the substrate edge independent of the biasing of the first pusher. Other aspects are provided.